

#### **United States Election Assistance Commission**

# Certificate of Conformance



**ES&S Unity 3.4.0.0** 

**Election Systems & Software** 

The voting system identified on this certificate has been evaluated at an accredited voting system testing laboratory for conformance to the 2002 Voting System Standards (2002 VSS). Components evaluated for this certification are detailed in the attached Scope of Certification document. This certificate applies only to the specific version and release of the product in its evaluated configuration. The evaluation has been verified by the EAC in accordance with the provisions of the EAC Voting System Testing and Certification Program Manual and the conclusions of the testing laboratory in the test report are consistent with the evidence adduced. This certificate is not an endorsement of the product by any agency of the U.S. Government and no warranty of the product is either expressed or implied.

Product Name: Unity	
Model or Version: Version 3.4.0.0	Des: Reller
Name of VSTL: Wyle Laboratories	Gra. / Reter
EAC Certification Number: ESSUnity3400	Chief Operating Officer and Acting Executive D

Date Issued: October 31, 2012

Chief Operating Officer and Acting Executive Director, U.S. Election Assistance Commission

**Scope of Certification Attached** 

Manufacturer: Election Systems & Software

System Name: Unity 3.4.0.0
Certificate: ESSUnity3400

**Laboratory:** Wyle Laboratories

Standard: VSS 2002

**Date:** *October 31, 2012* 



# Scope of Certification

This document describes the scope of the validation and certification of the system defined above. Any use, configuration changes, revision changes, additions or subtractions from the described system are not included in this evaluation.

## Significance of EAC Certification

An EAC certification is an official recognition that a voting system (in a specific configuration or configurations) has been tested to and has met an identified set of Federal voting system standards. An EAC certification is **not**:

- An endorsement of a Manufacturer, voting system, or any of the system's components.
- A Federal warranty of the voting system or any of its components.
- A determination that a voting system, when fielded, will be operated in a manner that meets all HAVA requirements.
- A substitute for State or local certification and testing.
- A determination that the system is ready for use in an election.
- A determination that any particular component of a certified system is itself certified for use outside the certified configuration.

# Representation of EAC Certification

Manufacturers may not represent or imply that a voting system is certified unless it has received a Certificate of Conformance for that system. Statements regarding EAC certification in brochures, on Web sites, on displays, and in advertising/sales literature must be made solely in reference to specific systems. Any action by a Manufacturer to suggest EAC endorsement of its product or organization is strictly prohibited and may result in a Manufacturer's suspension or other action pursuant to Federal civil and criminal law.

## System Overview:

ES&S Unity 3.4.0.0 is comprised of the AutoMARK Voter Assist Terminal (AutoMARK), Model 100 (M100), DS200 Precinct Digital Scanner (DS200), DS850 high-speed Central Count Digital Scanner, Model 650 high-speed Central Count Scanner (M650), Audit Manager (AM), Election Data Manager (EDM) and ES&S Ballot Image Manager (ESSIM), AutoMARK Information Management System (AIMS), Hardware Program Manager (HPM), Election Reporting Manager (ERM), Log Monitor Service, and VAT Previewer.

 AutoMARK Voter Assist Terminal enables voters who are visually or physically impaired and voters more comfortable reading or hearing instructions and choices in an alternative language to privately mark optical scan ballots. The AutoMARK supports navigation through touchscreen, physical keypad or ADA support peripheral such as a sip and puff device or two position switch.

- The ES&S Model 100 is a precinct-based, voter-activated paper ballot tabulator. The
  system uses Intelligent Mark Recognition (IMR) visible light scanning technology to
  accurately detect completed ballot targets. The Model 100 accepts ballots inserted in
  any orientation top first, face up; bottom first, face down; etc. Optical sensors
  simultaneously read both sides of the ballot, and accurately record voter selections, as
  the Counter passes the ballot to the integrated ballot box.
- DS200 digital scanner is a paper ballot tabulator designed for use as a polling place scanner. After the voter makes their selections on their paper ballot, their ballot is inserted into the unit for immediate tabulation. Both sides of the ballot are scanned at the same time using a high-resolution image-scanning device that produces ballot images.
- The DS850 is a high-speed, digital scan central ballot counter that uses cameras and imaging algorithms to capture voter selections on the front and back of a ballot, evaluate results and then sort ballots into discrete bins without interrupting scanning. A dedicated audit printer generates a continuous event log. Machine level reports are produced from a second, laser printer. The scanner saves voter selections and ballot images to an internal hard disk and exports results to a USB Memory stick for processing with Election Reporting Manager.
- M650 high-speed central count scanner is programmed by jurisdiction officials for a specific election with an election definition from a Zip disk. M650 prints a continuous audit log to a dedicated audit log printer and can print results reports directly from the scanner to a second connected printer. The scanner saves results to a Zip disk that officials can use to format and print results from a PC running Election Reporting Manager.
- Audit Manager runs in the background of the other Unity programs and provides password security and a real-time audit log of all user inputs and system outputs. Election coders use Audit Manager to set Unity system passwords and track user activity.
- Election Data Manager (EDM) is used to enter the election definition. Typically, a master
  election database is created one time and contains all precincts, districts, and precinct
  and district relationships. This master file is then used to build each election-specific file
  to which election-specific contests can be manually added or merged from a previous
  election file.
- ES&S Ballot Image Manager (ESSIM) is a desktop publishing tool that allows users to
  design and print ES&S paper ballots. ESSIM uses ballot style information created by EDM
  to display the WYSIWYG ballots. Users can then apply typographic formatting (font, size,
  attributes, etc.) to individual components of the ballot. Text and graphic frames can also
  be added to the ballot.
- AutoMARK Management Information System (AIMS) is composed of a compatible PC computer and the AIMS application software that manages all of the information required by the AutoMARK Voter Assist Terminal (VAT) for an election. AIMS imports data configured in ESSIM to configure the audio and visual ballot presentation for the AutoMARK and to mark inserted ballots.
- Hardware Program Manager (HPM) enables the user to import, format, and convert the
  election file; define districts; specify election contests and candidates; create election
  definitions for ballot scanning equipment; burn PCMCIA Cards, Zip Disks, Compact Flash

Cards or USB media device. The Hardware Programming Manager is primarily used for converting the election IFC file for use with the Election Reporting Manager and for creating and loading election parameters; however, it may also be used for coding the election.

• Election Reporting Manager (ERM) is ES&S election results reporting program. ERM generates paper and electronic reports for election workers, candidates, and the media. ERM can also display updated election totals on a monitor as ballot data is tabulated, and it can send results reports directly to media outlets.

# Certified System before Modification:

Unity 3.2.1.0

## Anomalies and/or Additions addressed in Unity 3.4.0.0:

For the ES&S Unity 3.4.0.0 Voting System, Wyle only tested the DS200 for modifications, inclusion and integration of the DS850, and both interfaces with the EMS.

#### Mark definition:

ES&S' declared level mark recognition for the DS200 and DS850 is a mark across the oval that is 0.2" long x 0.03" wide at any direction.

# **Tested Marking Devices:**

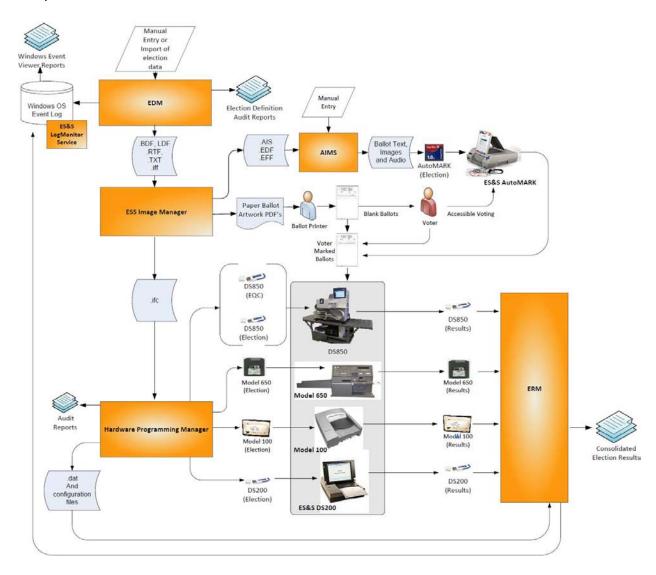
Bic Grip Roller Pen

### Language capability:

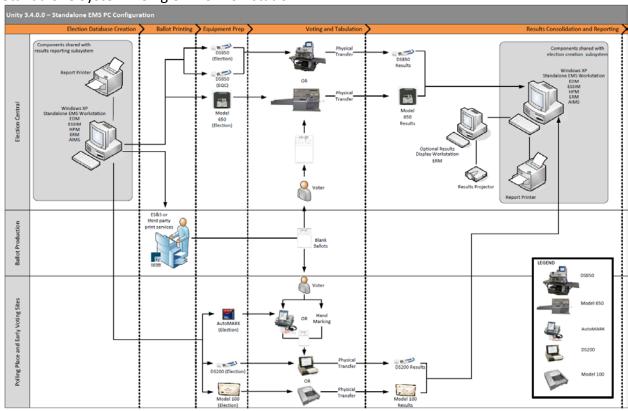
Unity 3.4.0.0 supports only English and Spanish ballot languages.

# Components Included:

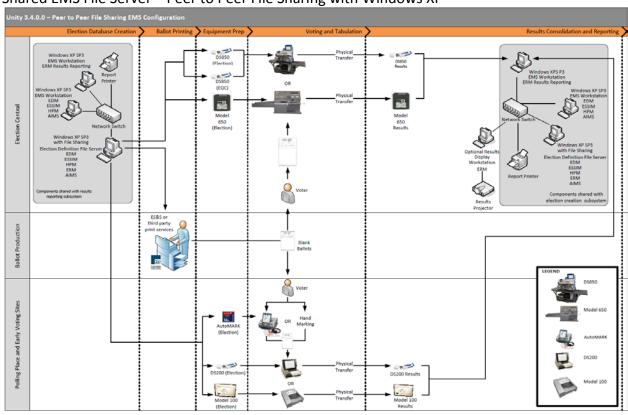
This section provides information describing the components and revision level of the primary components included in this Certification.



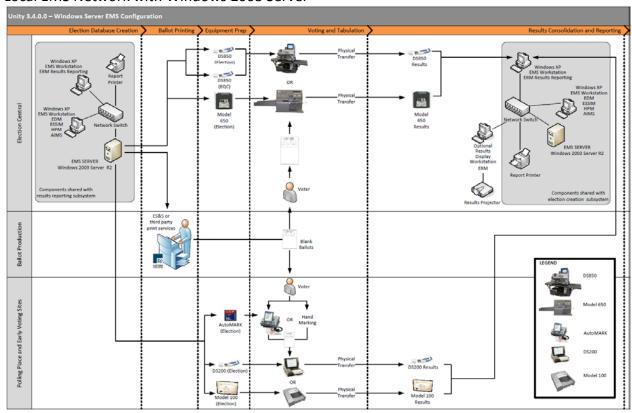
# Standalone System – Single EMS Workstation



# Shared EMS File Server – Peer to Peer File Sharing with Windows XP



# Local EMS Network with Windows 2003 Server



System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
DS200	1.6.1.0	1.2	•	Precinct Digital
				Scanner
M100	5.4.4.5	1.3		Precinct Optical
				Scanner
Model 650	2.2.2.0	1.1, 1.2		Central Count
				Scanner, high-
				speed
AutoMARK A100	1.3.2907	1.0		ADA Ballot
				Marking Device
AutoMARK A200	1.3.2907	1.1, 1.3		ADA Ballot
				Marking Device
DS850	2.2.0.0	1.0		Central Count
				Scanner, high-
				speed
Ballot Box		1.2, 1.3		Plastic ballot box
Hardware				
Ballot Box		1.0, 1.1, 1.2		Metal ballot box
Hardware				with/without

Component   Version   Version   System or COTS	System	Software or Firmware	Hardware	Operating	Comments
Audit Manager (AM)	Component	Version	Version	System or COTS	Comments
Election Data					diverter
Election Data   Manager (EDM)   FSS Ballot Image   Manager (ESSIM)	Audit Manager	7.5.2.0			
Manager (EDM)   ESS Ballot Image   7.7.1.0   Manager (ESSIM)     Hardware   5.8.0.0   Programming   Manager (HRM)     Election Results   7.8.0.0   Manager (ERM)     Log Monitor   1.0.0.0   Service   AutoMARK   13.257   Information   Management   System (AIMS)     Server PC   Dell Optiplex   GX260     Server PC   Dell Precision   T3500     Client PC   Dell Optiplex   760     VAT Previewer   1.3.2907   Ballot on   Demand Printer   Ballot on   Demand Printer   DS850 Report   Microline 420   Dot Matrix Printer   DS850 Report   Printer   DS850 Report   Microline 420   Dot Matrix Printer   DS850 Audit Log   TPrinter   DS850 Audit Log   TPRINTER   TRANSPORT   TRA	(AM)				
ESS Ballot Image   Manager (ESSIM)	Election Data	7.8.1.0			
Manager (ESSIM)   Hardware	Manager (EDM)				
Hardware	ESS Ballot Image	7.7.1.0			
Programming   Manager (HRM)   Election Results   7.8.0.0   Manager (ERM)   Log Monitor   1.0.0.0   Service   AutoMARK   Information   Management   System (AIMS)   Server PC   Dell Optiplex   GX260   Server PC   Dell Precision   T3500   T3500   Client PC   Dell Optiplex   760   VAT Previewer   1.3.2907   Ballot on   Demand Printer   Ballot on   Demand Printer   Ballot on   Demand Printer   DS850 Report   OKI B430   Demand Printer   DS850 Report   Microline 420   Printer   DS850 Report   Printer   DS850 Audit Log   HP LaserJet   4050N   Results storage for M650   Headphones   Avid FV 60   USB Flash Drive   Delkin 512MB   USB Flash Drive   Delkin 4GB   Delkin 1 GB   USB Flash Drive   Delkin 4 GB   USB Flash Drive   Delkin 1 GB   Delkin 1 GB   Delkin 1 GB   USB Flash Drive   Delkin 1 GB   Delkin 1 CB   Delkin 1 GB   Delkin 1 GB   Delkin 1 GB   Delkin 1 CB   Delkin 1 CB	Manager (ESSIM)				
Manager (HRM)   Election Results   7.8.0.0   Manager (ERM)   Log Monitor   Service	Hardware	5.8.0.0			
Election Results	Programming				
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Service AutoMARK Information Management System (AIMS)  Server PC  Server PC  Dell Optiplex GX260  Server PC  Dell Optiplex T60  VAT Previewer Ballot on Demand Printer Ballot on Demand Printer Ballot on Demand Printer Ballot on Demsor VAT Previewer  Dot Matrix Printer Dot Matrix Printer Printer DS850 Report Printer Det Microline 420 Dot Matrix Printer Printer DS850 Audit Log Avid FV 60 USB Flash Drive Delkin 512MB USB Flash Drive Delkin 512MB USB Flash Drive Delkin 1 GB Delkin 1 GB Delkin 1 GB Delkin 1 GB Delkin Devices	Manager (ERM)				
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Management System (AIMS)  Server PC  Dell Optiplex GX260  Server PC  Dell Precision T3500  Client PC  Dell Optiplex 760  VAT Previewer  Ballot on Demand Printer  Ballot on Demand Printer  DS850 Report Printer  DS850 Report Printer  DS850 Report Printer  DS850 Audit Log  HP LaserJet 4050N  Zip Disk  Results storage for M650  Headphones  Avid FV 60  USB Flash Drive Delkin 4GB USB Flash Drive Delkin 1 GB	AutoMARK	1.3.257			
System (AIMS)   Server PC	Information				
Server PC         Dell Optiplex GX260           Server PC         Dell Precision T3500           Client PC         Dell Optiplex 760           VAT Previewer         1.3.2907           Ballot on Demand Printer         OKI C9650           Demand Printer         Demand Printer           DS850 Report Printer         OKI B431dn Avice Frequency           DS850 Report Printer         Microline 420           Dot Matrix Printer         Dot Matrix Printer           DS850 Audit Log         HP LaserJet 4050N           Zip Disk         Results storage for M650           Headphones         Avid FV 60           USB Flash Drive         SanDisk 2GB Cruzer Micro           USB Flash Drive         Delkin 512MB           USB Flash Drive         Delkin 8 GB           USB Flash Drive         Delkin 1 GB           USB Flash Drive         Delkin Devices	Management				
CX260	System (AIMS)				
Dell Precision	Server PC		Dell Optiplex		
Client PC  Dell Optiplex 760  VAT Previewer  1.3.2907  Ballot on Demand Printer  Ballot on Demand Printer  DS850 Report Printer  DS850 Report Printer  DS850 Report Printer  DS850 Audit Log  HP LaserJet 4050N  Zip Disk  Results storage for M650  Headphones  Avid FV 60  USB Flash Drive  USB Flash Drive  USB Flash Drive  USB Flash Drive  Delkin 4GB USB Flash Drive  Delkin 1 GB USB Flash Drive  Delkin 2 GB Crompact Flash Delkin Devices			GX260		
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Ballot on Demand Printer  DS850 Report Printer  DS850 Report Printer  DS850 Report Printer  DS850 Report Printer  DS850 Audit Log  HP LaserJet 4050N  Zip Disk  Results storage for M650  Headphones  Avid FV 60  USB Flash Drive  USB Flash Drive  Delkin 512MB  USB Flash Drive  Delkin 4GB  USB Flash Drive  Delkin 1 GB  USB Flash Drive  Delkin 2 GB  Crompact Flash  Delkin Devices	Ballot on		OKI C9650		
Demand Printer  DS850 Report Printer  DS850 Report Printer  DS850 Report Printer  DS850 Audit Log  HP LaserJet 4050N  Zip Disk  Results storage for M650  Headphones  Avid FV 60  USB Flash Drive  USB Flash Drive  USB Flash Drive  Delkin 512MB  USB Flash Drive  Delkin 8 GB  USB Flash Drive  Delkin 1 GB  USB Flash Drive  Delkin 2 GB  Compact Flash  Delkin Devices	Demand Printer				
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USB Flash Drive Delkin 2 GB Compact Flash Delkin Devices	USB Flash Drive		Delkin 1 GB		
Compact Flash Delkin Devices					
			1 GB Compact		

System Component	Software or Firmware Version	Hardware Version	Operating System or COTS	Comments
		Flash		

# **System Limitations**

This table depicts the limits the system has been tested and certified to meet.

Characteristic	Limiting Component	Limit	Comment
Precincts Allowed in an Election	HPM/ERM	2900	1639 if using paper ballot
			coded by precinct
Precinct included per poll (reporting limit)	ERM	1900	
Candidate/counters per election	ERM	21000	
Maximum candidates	HPM	9900	
Contest allowed in an election	ERM	Depends on election	Limited by 21000 maximum counters
Candidates/counters allowed per precinct	ERM import	1000	
Ballot styles allowed per election	HPM (ballot sequence code)	5500	1639 if using paper ballot coded by style
Contests allowed per ballot style	HPM	200	Or number of ballot positions
Precincts allowed per ballot style	HPM	1500	
Candidates (ballot choices) allowed per contest	HPM	175	
Count for any precinct element	ERM Report (ERM results import)	500000	65550 from any tabulator media
Number of parties allowed	HPM	18	
"Vote for" per contest	HPM	90	
Blanket Primary Elections			Not supported

#### **Component Limitations:**

#### PAPER BALLOT LIMITATIONS

- 1. The paper ballot code channel, which is the series of black boxes that appear between the timing track and ballot contents, limits the number of available ballot variations depending on how a jurisdiction uses this code to differentiate ballots. The code can be used to differentiate ballots by Sequence (limited to 1-1639 variations), Type (1-30 variations) or Split (1-40 variations).
- 2. If Sequence is used as a ballot style ID, it must be unique election-wide and the Split code will always be 1.

3. If Sequence is used as a precinct ID, it limits the number of styles in a precinct to 1200 (30 Types x 40 Splits).

#### **DS200**

- 1. A DS200 coded for Election Day counting will not support more than 18 precincts.
- 2. The DS200 does not support more than 40 ballot styles in a single absentee precinct in a ballot by-style election. If an election definition contains more than 40 ballot styles, the user has to define more than one absentee precinct and then separate the ballots into groups for processing.
- 3. All optical scan ballots used in a given election must be the same size and have the same position capacity.
- 4. An early vote station will only support a maximum limit of 9999 precincts. A large number of precincts may result in small ballot processing delays.
- 5. An early vote station will not be able to print a precinct-by-precinct report by default.

#### MODEL 100 (M100)

- 1. The Model 100 does not support more than 18 Election Day precincts, or 450 early voting precincts.
- 2. A Model 100 PCMCIA card can only contain a maximum of 18 precincts. The user should not assign more than 18 precincts to a Model 100 polling place in HPM.
- 3. The Model 100 does not support more than 40 ballot styles in a single absentee precinct in a ballot by-style election. If an election definition contains more than 40 ballot styles, the user has to define more than one absentee precinct and then separate the ballots into groups for processing.
- 4. The M100 supports a maximum of 200 contests per ballot style.
- 5. All ballots used in a given election must be the same size and have the same position capacity.
- 6. An early vote station will only support a maximum limit of 450 precincts. This limit is due to the limited memory capacity of both the PCMCIA card and the internal memory of the Model 100 precinct tabulator.
- 7. An early vote station will not be able to use ballots-by-style.
- 8. An early vote station will not be able to use a modem to transmit totals.
- 9. An early vote station will not be able to print a precinct-by-precinct report by default.

#### **MODEL 650**

- 1. The Model 650 supports a maximum 37503 candidates or counters for any election.
- 2. The M650 does not support more than 100 ballot styles for a single absentee precinct in a ballot by-style election. If an election definition contains more than 100 ballot styles, the user

has to define more than one absentee precinct and then separate the ballots into groups for processing

- 3. All optical scan ballots used in a given election must be the same size and have the same position capacity.
- 4. The M650 does not support the Arrow style response area.
- 5. Ballots must be fed in one particular orientation.
- 6. The Model 650 can interpret a maximum of 1499 office group codes in an election definition. (An "office group" is defined as the collection of one or more contests (including rotation) that always appear together on any ballot style.). This limitation restricts the number of precincts allowed in an election if "precinct only" offices are defined (District Type PRC) because each "precinct only" office always appears in a different office group.

#### **DS850**

1. All ballots used in a given election must be the same size and have the same position capacity.

#### **AUTOMARK VOTER ASSIST TERMINAL**

- 1. ES&S AutoMARK capacities exceed all documented limitations for the ES&S election management, vote tabulation and reporting system. For this reason, Election Management System and ballot tabulator limitations define the boundaries and capabilities of the AutoMARK system as the maximum capacities of the ES&S AutoMARK are never approached during testing
- 2. The AutoMARK recognizes ballot content by the code channel. If the Sequence code is used for Ballot Style ID and the election definition has more than one precinct that uses a specific ballot style, the AutoMARK will not determine which precinct the ballot is associated with. The user should not define ballot style names in the election definition that imply precinct.

#### **ELECTION DATA MANAGER**

- 1. In both open and closed primary elections, operational procedures to define the election in EDM must be strictly followed.
- 2. The user must input the Party Preference (or Pick Contest) title as "Party Preference" in the Office Title box in the Add Office Information window.
- 3. The user must add a "crossover party" using the Parties option under the **County** menu when the election is an open primary with a party preference race.
- 4. There is a limitation of 99 candidates for rotation positions. This limit does not apply to positions that float and do not change candidate order.
- 5. The maximum number of languages supported is 13.
- 6. The ability to delete parties under the **County** and **Election** menu is not supported.
- 7. In a primary election, the system does not support displaying the contest(s) from another party's ballot if a third party in the election has candidates in that contest.

#### **ES&S BALLOT IMAGE MANAGER**

- 1. ESS Image Manager requires the installation of Adobe Type Manager for assurance that screen displays of the ballot match the printed ballot.
- 2. ESSIM does not give a column number or position to straight party candidates in the .ifc. The user must assign these manually in HPM.

#### **BALLOT ON DEMAND**

- 1. Ballot on Demand requires an Oki printer.
- 2. Batch Ballot printing is not reflected in any BOD reports.
- 3. Batch Ballot serial numbers are not supported with multi-page ballots.

#### HARDWARE PROGRAMMING MANAGER (WINDOWS)

- 1. Hardware Programming Manager supports no more than 18 parties for a single election. This limit is reduced to 12 parties, counting "nonpartisan" as a party, for an Open Primary election that uses two page ballots with the second page containing only non-partisan contests. Party/partisan contents CANNOT flow between pages in an Open Primary.
- 2. When coding an election for an Open primary, the user cannot include (in total voting) the crossover party listed in the **Description** box in the Election Specifications window. The party type displays in the numbered description box, but the user should clear the **Include** check box next to the crossover party type.
- 3. When coding an election for an open primary, the party preference contests must be identified as nonpartisan.
- 4. There is a maximum of 31 Statistical Party Counters.
- 5. Change/Add Polling Place
  - A polling place may be identified to contain all precinct in the election
  - There is a limit of 80 Precincts that can be assigned to a Polling Place with the following exceptions:
  - The M100 and DS200 have a limit of 18 individually selected precincts that can be assigned to a polling place.

#### 6. Ballot Styles

• In an Open Primary, the number of contest associated with any party (or "nonpartisan" designation) within a ballot style cannot exceed 70. For an Open Primary election, this limitation replaces the 200 contest limit.

#### 7. Districts

- A district is identified by a code that contains 7 positions but is constructed of a 3 position District Type code and a 4 position District code within the type. There are a limit of 19 District Types and 39 Districts for any given type except for the "PRC" district type. The "PRC" district type is used in an election where virtually all precincts have one or two unique precinct specific contests. When the "PRC" district type is active, the District code is designated by the 4 position precinct ID code. The number of precincts that can use this code is a function of the election content and limited by the M650. See "Section 2.2.1."
- A precinct can only have 39 total districts associated with it.

# 8. Candidates

• The maximum number of candidate rotations per contest is 140. This includes candidate position sets where candidate order is not changed, but use alternate position numbers.

#### **ELECTION REPORTING MANAGER**

- 1. The Election Reporting Manager requires a minimum monitor screen resolution of 800 x 600.
- 2. ERM's maximum page size for reports is 5,000 pages.
- 3. Serve650 continues to run after ERM is stopped via the Windows Task Manager. If the ERM task is ended, Serve650 must also be canceled, or the PC rebooted.
- 6. Mixed equipment within a single SPP file is not supported. Each equipment type must have its own SPP file.
- 7. Contest/Precinct selection pop up display limited to 2,900 contests/precincts.
- 8. Dynamic Precinct Reports are not supported when updating results from iVotronic Audit Data.
- 9. Foreign characters are not supported in ERM. This has to do with the creation of the XML results file out of ERM.
- 10. Generating a District Canvass Report without first properly creating a .DST file can result in inaccurate totals reports and inconsistent report formatting.
- 11. When retrieving election data from DS200 tabulators; ERM supports a maximum of 1900 precincts for an "All Precincts Included" Poll.

#### **AUTOMARK INFORMATION MANAGEMENT SYSTEM (AIMS)**

If the number of precincts imported from Election Data Manager exceeds 840, an election administrator must manually configure the code channel for precinct number 840 within AIMS. Code channel information for all other precincts imports properly.

# **Functionality**

#### 2005 VVSG Supported Functionality Declaration

Feature/Characteristic	Yes/No	Comment	
Voter Verified Paper Audit Trails			
VVPAT	No		
Accessibility			
Forward Approach	Yes		
Parallel (Side) Approach	No		
Closed Primary			
Primary: Closed	Yes		
Open Primary			
Primary: Open Standard (provide definition of how supported)	Yes		
Primary: Open Blanket (provide definition of how supported)	No		
Partisan & Non-Partisan:			

Feature/Characteristic	Yes/No	Comment
Partisan & Non-Partisan: Vote for 1 of N race	Yes	
Partisan & Non-Partisan: Multi-member ("vote for N of M") board	Yes	
races		
Partisan & Non-Partisan: "vote for 1" race with a single candidate	Yes	
and write-in voting		
Partisan & Non-Partisan "vote for 1" race with no declared	Yes	
candidates and write-in voting		
Write-In Voting:		
Write-in Voting: System default is a voting position identified for	Yes	
write-ins.		
Write-in Voting: Without selecting a write in position.	Yes	
Write-in: With No Declared Candidates	Yes	
Write-in: Identification of write-ins for resolution at central count	Yes	
Primary Presidential Delegation Nominations & Slates:		
Primary Presidential Delegation Nominations: Displayed delegate	No	
slates for each presidential party		
Slate & Group Voting: one selection votes the slate.	No	
Ballot Rotation:		
Rotation of Names within an Office; define all supported rotation	Yes	
methods for location on the ballot and vote tabulation/reporting		
Straight Party Voting:		
Straight Party: A single selection for partisan races in a general	Yes	
election		
Straight Party: Vote for each candidate individually	Yes	
Straight Party: Modify straight party selections with crossover votes	Yes	
Straight Party: A race without a candidate for one party	Yes	
Straight Party: N of M race (where "N">1)	Yes	
Straight Party: Excludes a partisan contest from the straight party	Yes	
selection		
Cross-Party Endorsement:		
Cross party endorsements, multiple parties endorse one candidate.	Yes	
Split Precincts:		
Split Precincts: Multiple ballot styles	Yes	
Split Precincts: P & M system support splits with correct contests and	Yes	
ballot identification of each split		
Split Precincts: DRE matches voter to all applicable races.	No	
Split Precincts: Reporting of voter counts (# of voters) to the precinct	Yes	It is possible to list the
split level; Reporting of vote totals is to the precinct level		number of voters.
Vote N of M:		
Vote for N of M: Counts each selected candidate, if the maximum is	No	
not exceeded.		
Vote for N of M: Invalidates all candidates in an overvote (paper)	No	

Feature/Characteristic	Yes/No	Comment
Recall Issues, with options:		
Recall Issues with Options: Simple Yes/No with separate	Yes	
race/election. (Vote Yes or No Question)		
Recall Issues with Options: Retain is the first option, Replacement	Yes	
candidate for the second or more options (Vote 1 of M)		
Recall Issues with Options: Two contests with access to a second	No	
contest conditional upon a specific vote in contest one. (Must vote		
Yes to vote in 2 <sup>nd</sup> contest.)		
Recall Issues with Options: Two contests with access to a second	No	Overturned - US
contest conditional upon any vote in contest one. (Must vote Yes to		District Court 7/29/03:
vote in 2 <sup>nd</sup> contest.)		CA Election Code
		sect. 11383
Cumulative Voting		
Cumulative Voting: Voters are permitted to cast, as many votes as	No	
there are seats to be filled for one or more candidates. Voters are not		
limited to giving only one vote to a candidate. Instead, they can put		
multiple votes on one or more candidate.		
Ranked Order Voting		
Ranked Order Voting: Voters can write in a ranked vote.	No	
Ranked Order Voting: A ballot stops being counting when all ranked	No	
choices have been eliminated		
Ranked Order Voting: A ballot with a skipped rank counts the vote	No	
for the next rank.		
Ranked Order Voting: Voters rank candidates in a contest in order of	No	
choice. A candidate receiving a majority of the first choice votes		
wins. If no candidate receives a majority of first choice votes, the last		
place candidate is deleted, each ballot cast for the deleted candidate		
counts for the second choice candidate listed on the ballot. The		
process of eliminating the last place candidate and recounting the		
ballots continues until one candidate receives a majority of the vote		
Ranked Order Voting: A ballot with two choices ranked the same,	No	
stops being counted at the point of two similarly ranked choices.		
Ranked Order Voting: The total number of votes for two or more	No	
candidates with the least votes is less than the votes of the candidate		
with the next highest number of votes, the candidates with the least		
votes are eliminated simultaneously and their votes transferred to		
the next-ranked continuing candidate.		
Provisional or Challenged Ballots		
Provisional/Challenged Ballots: A voted provisional ballots is	Yes	
identified but not included in the tabulation, but can be added in the		
central count.		

Feature/Characteristic	Yes/No	Comment
Provisional/Challenged Ballots: A voted provisional ballots is	Yes	
included in the tabulation, but is identified and can be subtracted in		
the central count		
Provisional/Challenged Ballots: Provisional ballots maintain the	Yes	
secrecy of the ballot.		
Overvotes (must support for specific type of voting system)		
Overvotes: P & M: Overvote invalidates the vote. Define how	Yes	
overvotes are counted.		
Overvotes: DRE: Prevented from or requires correction of	No	
overvoting.		
Overvotes: If a system does not prevent overvotes, it must count	Yes	
them. Define how overvotes are counted.		
Overvotes: DRE systems that provide a method to data enter	No	
absentee votes must account for overvotes.		
Undervotes		
Undervotes: System counts undervotes cast for accounting purposes	Yes	
Blank Ballots		
Totally Blank Ballots: Any blank ballot alert is tested.	Yes	
Totally Blank Ballots: If blank ballots are not immediately processed,	Yes	
there must be a provision to recognize and accept them		
Totally Blank Ballots: If operators can access a blank ballot, there	Yes	
must be a provision for resolution.		
Networking		
Wide Area Network – Use of Modems	No	
Wide Area Network – Use of Wireless	No	
Local Area Network – Use of TCP/IP	No	
Local Area Network – Use of Infrared	No	
Local Area Network – Use of Wireless	No	
FIPS 140-2 validated cryptographic module	No	
Used as (if applicable):		
Precinct counting device	Yes	M100, DS200
Central counting device	Yes	M650, DS850

# Baseline Certification Engineering Change Order's (ECO)

# This table depicts the ECO's certified with the voting system:

Change ID	Date	Component	Description	Inclusion
000683	5/10/11	DS200	Modify locking hooks/tabs on LCD housing	De Minimis Optional
000819	5/10/11	DS200 Ballot Box	Modify emergency bin to improve stacking	De Minimis Optional

Change ID	Date	Component	Description	Inclusion
000821	5/10/11	DS200 Ballot Box	Modify emergency bin to improve stacking	De Minimis Optional
000852	5/10/11	DS200 Ballot Box	Modify carry case to improve paper handling	De Minimis Optional
000702	6/16/11	DS200	Add alternate display switch	De Minimis Optional
000839	6/16/11	DS200 Ballot Box	Change caster mounts to ease assembly	De Minimis Optional
864	8/11/11	AutoMARK	Printed Circuit Boards End of Life	De Minimis Optional
871	8/30/11	DS200/DS850	Second Source for USB Connector for Delkin 4-8gb	De Minimis Optional
872	6/25/12	DS200/DS850	Release a new 4 GB USB thumb drive	De Minimis Optional
873	6/25/12	DS200/DS850	Release a new 8 GB USB thumb drive	De Minimis Optional
875	6/25/12	AutoMARK	Release 1GB Compact Flash	De Minimis Optional
876	11/10/11	AutoMARK	Redefine AutoMARK hardware revision level	De Minimis Optional
878	6/25/12	AutoMARK	End of Life AutoMARK components	De Minimis Optional
881	8/31/12	DS200/DS850	Allow color housing on 1gb, 2gb, 4gb and 8gb USB drives	De Minimis Optional
882	10/26/12	DS200/DS850	Introduce Delkin 1gb & 2gb USB drives	De Minimis Optional
884	8/31/12	DS200	Add rubber gasket for steel ballot box	De Minimis Optional
1029	8/31/12	DS200/DS850	Introduce new delkin compact flash	De Minimis Optional